

**ABSTRACT**

A system and method of transmitting data frames between media access control (MAC) devices through a mesh of data switches is disclosed. Each of the data switches maps each MAC device to a port or aggregation of ports on the data switch for transmitting data frames having a destination associated with the MAC device. Upon receipt of a data frame from a previously undiscovered MAC device at a first data switch, the first data switch informs the other data switches of the undiscovered MAC device. This permits each of the other data switches to map the undiscovered MAC device with a port or aggregation of ports mapped to the first data switch. The other data switches may then transmit subsequent data frames having a destination associated with the previously undiscovered MAC device through a port or aggregation of ports mapped to the first data switch.

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